U.S. UTILITY Patent Application OLP.E. OLP.E	Subclass				
U.S. UTILITY Patent Application O.I.P.E. O.I	S S CLASSIF				
U.S. UTILITY Patent Application O.I.P.E. O.I	Class SSUE (<u>. </u>			
APPLICATION No. O9/576297 F 359 SUBCLASS SUBCLASS ART UNIT 2873 EXAMINER			Application PATE	NT DATE	
APPLICATION NO. O9/576297 F SSSUING CLASS SUBCLASS F CROSS REFERENCE(S) CROSS REFERENCE(S) CROSS REFERENCE(S) TERNINAL CLASS SUBCLASS F CLASS SUBCLASS F CLASS SUBCLASS F CROSS REFERENCE(S) CROSS REFERENCE(S) CROSS REFERENCE(S) F CROSS REFERENCE(S) CROSS REFERENCE(S) F TERNINAL CLASS SUBCLASS F CROSS REFERENCE(S) CROSS REFERENCE(S) CROSS REFERENCE(S) CROSS REFERENCE(S) F CROSS REFERENCE(S) CROSS REFERENCE	Δ	KW MC	AA		
Makoto Misaka Zoom lens, and image pickup apparatus and image projection apparatus using the same SSUING CLASSIFICATION CROSS REFERENCE(S) CLASS SUBCLASS CLASS SUBCLASS ONE SUBCLASS PER BLOCK) INTERNATIONAL CLASSIFICATION INTERNATIONAL CLAS	Y	SCANNED _// U.S.			
Makoto Misaka Zoom lens, and image pickup apparatus and image projection apparatus using the same SSUING CLASSIFICATION CROSS REFERENCES CLASS SUBCLASS ONE SUBCLASS PER BLOCK) INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION DRAWINGS CLASS SUBCLASS PER BLOCK) TERNINAL DISCLAMER Shoets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for Claims of Claims authorquest to The seminal date of U.S. Patent. No. The terminal months of this patent and on the expiration date of U.S. Patent. No. [Continued on lacalization of this patent shall had extend beyond the expiration date of U.S. Patent. No. [Continued on lacalization of this patent shall had extend beyond the expiration date of U.S. Patent. No. [Continued on lacalization of this patent shall had extend beyond the expiration date of U.S. Patent. No. [Continued on lacalization of this patent shall had extend beyond the expiration date of U.S. Patent. No. [Continued on lacalization of this patent shall had extend beyond the expiration date of U.S. Patent. No. [Continued on lacalization of this patent shall had extend beyond the expiration date of U.S. Patent. No. [Continued on lacalization of this patent shall had extend beyond the expiration date of U.S. Patent. No. [Continued on lacalization of this patent shall had extend beyond the expiration date of U.S. Patent. No. [Continued on lacalization of this patent shall had extend beyond the expiration date of U.S. Patent. No. [Continued on lacalization of this patent shall had extend beyond the expiration of this patent shall had extend beyond the expiration of this patent shall had extend beyond the expiration of this patent shall had extend beyond the expiration of this patent shall have expirated the expiration of this patent shall have been disclaimed. [Continued on lacalization of this patent shall have expirated the expiration of this patent shall have expirated the expiration of this patent shall have expirated the expiration of this patent shall have expirated the expirati	APPLICATION NO. CONT/PRIOR	1 00-00		EXAMINER	\\ \frac{1}{2} \cdot \cd
TERMINAL DRAWINGS DISCLAIMS ALLOWED		359 <u>5</u> 86	2873	1 / 11	
SSUING CLASSIFICATION	Makoto Misaka				
Zoom lens, and image pickup apparatus and image projection apparatus using the same SSUING CLASSIFICATION CROSS REFERENCE(S)	- CAI	•			
SSUING CLASSIFICATION	A love and ima	ne pickup apparatus	s and ima	ge projectio	ייי
CLASS SUBCLASS CLASS SUBCLASS SUBC		ne same			PTO-2040
CLASS SUBCLASS CLASS SUBCLASS FER BLOCK) INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNAL COntinued on Issue Slip Inside File Vaccet Continued on Issue Slip Inside File Vaccet INTERNAL CONTINUED INTERNAL Sheets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for Continued on Issue Slip Inside File Vaccet Internation of this patent shall (date) Inside Print Claim for Continued on Issue Slip Inside File Vaccet Internation of this patent shall (date) In	Į į	*		- Terresta i G e	12/99
CLASS SUBCLASS CLASS SUBCLASS FER BLOCK) INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNAL COntinued on Issue Slip Inside File Vaccet Continued on Issue Slip Inside File Vaccet INTERNAL CONTINUED INTERNAL Sheets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for Continued on Issue Slip Inside File Vaccet Internation of this patent shall (date) Inside Print Claim for Continued on Issue Slip Inside File Vaccet Internation of this patent shall (date) In	Control of the same of the same of				
CLASS SUBCLASS CLASS SUBCLASS FER BLOCK) INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNAL COntinued on Issue Slip Inside File Vaccet Continued on Issue Slip Inside File Vaccet INTERNAL CONTINUED INTERNAL Sheets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for Continued on Issue Slip Inside File Vaccet Internation of this patent shall (date) Inside Print Claim for Continued on Issue Slip Inside File Vaccet Internation of this patent shall (date) In					
CLASS SUBCLASS CLASS SUBCLASS FER BLOCK) INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNAL COntinued on Issue Sip Inside File Jacket Continued on Issue Sip Inside File Jacket CLAIMS ALLOWED The term of this patent shall fine term of this patent shall fine textend beyond the expiration date of U.S. Patent. No. INTERNAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNAL CLASSIFICATION INTERNATIONAL CLASSIFICATION INTERNATION		ICCHING CLASSI	FICATION		
CLASS SUBCLASS CLASS SUBCLASS (ONE SUBCLASS PER BLOCK) INTERNATIONAL CLASSIFICATION INTERNATIO					
INTERNATIONAL CLASSIFICATION INTERNATIONAL CLASSIFICATION Continued on Issue Slip Inside File Vacket Continued on Issue Slip Inside File Vacket Continued on Issue Slip Inside File Vacket CLAIMS ALLOWED The term of this patient subsequent to		CLASS II SUI		407 11 11 11 11 11	OCK)
TERMINAL DISCLAIMER Sheets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for C NOTICE OF ALLOWANCE MAILE Amount Die Date Paid (Primary Examiner) (Date) ISSUE FEE Amount Die Date Paid ISSUE BATCH NUMBER	CLASS SUBCLASS	T. P. CLASS		MC	(1) Sec. (2)
Continued on Issué Silp Inside File Jacket			1 - y 1	** *** ***	32.13 (5.4) (7.54)
TERMINAL DISCLAIMER Sheets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for Combined this patent subsequent to	ANTEDNATIONAL CLASSIFICATION	ÓN		***	
TERMINAL DISCLAIMER Sheets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for Combined this patent subsequent to	** 3. La	ÓN		ties at the second	
TERMINAL DISCLAIMER Sheets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for Combined this patent subsequent to	** 3. La	ÓN			
TERMINAL DISCLAIMER Sheets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for Combined this patent subsequent to	** 3. La	ÓN .			
TREMINAL DISCLAIMER Sheets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for Comparing the subsequent to	** 3. La	ÓN		4	
The term of this patent subsequent to	** 3. La	ON CONTRACTOR OF THE CONTRACTO		4	nside File Jacket
DISCLAIMER Sheets Drwg, Figs. Drwg. Print Fig. Total Claims Print Claim for C NOTICE OF ALLOWANCE MAILER (Date) The term of this patent shall Inot extend beyond the expiration date of U.S Patent. No. (Primary Examiner) (Date) ISSUE FEE Amount Due Date Paid (Legal Instruments Examiner) (Date)	** 3. La	ÓN .		4	Inside File Jacket
NOTICE OF ALLOWANCE MAILER NOTICE OF ALLOWANCE MAILER (date) has been disclaimed. The term of this patent shall not extend beyond the expiration date of U.S Patent. No. (Primary Examiner) (Date) ISSUE FEE Amount Due Date Paid (Primary Examiner) (Date) ISSUE BATCH NUMBER				continued on Issue Slip.	
The term of this patent subsequent to	TERMINAL	DRAWINGS		continued on Issue Sup.	S ALLOWED
The term of this patent subsequent to	TERMINAL	DRAWINGS		continued on Issue Sup.	S ALLOWED Print Claim for C
has been disclaimed. [Assistant Examiner] (Date) The term of this patent shall not extend beyond the expiration date of U.S. Patent. No. [Primary Examiner] (Date) [SSUE FEE] Amount Due Date Paid [Primary Examiner] (Date) [SSUE BATCH NUMBER]	TERMINAL DISCLAIMER	DRAWINGS		continued on Issue Slip CLAIM: Total Claims	B ALLOWED Print Claim for C
The term of this patent shall not extend beyond the expiration date of U.S Patent. No. ISSUE FEE	TERMINAL DISCLAIMER	DRAWINGS Sheets Drwg, Figs. Drwg.		continued on Issue Slip CLAIM: Total Claims	B ALLOWED Print Claim for C
not extend beyond the expiration date of U.S Patent. No. (Primary Examiner) (Date) ISSUE FEE Amount Due Date Paid ISSUE BATCH NUMBER (Legal Instruments Examiner) (Date)	TERMINAL DISCLAIMER The term of this patent subsequent to	DRAWINGS Sheets Drwg, Figs. Drwg.	Print Fig.	continued on Issue Slip CLAIM: Total Claims	B ALLOWED Print Claim for C
(Primary Examiner) (Primary Examiner) (Date) ISSUE BATCH NUMBER (Legal Instruments Examiner) (Date)	TERMINAL DISCLAIMER The term of this patent subsequent to (date) has been disclaimed.	DRAWINGS Sheets Drwg, Figs. Drwg.	Print Fig.	continued on Issue Slip CLAIM: Total Claims	B ALLOWED Print Claim for C
ISSUE BATCH NUMBER The terminalmonths of this patent have been disclaimed. (Legal Instruments Examiner) (Date)	TERMINAL DISCLAIMER The term of this patent subsequent to	DRAWINGS Sheets Drwg, Figs. Drwg. (Assistant Examiner)	Print Fig.	continued on Issue Silp. CLAIM! Total Claims NOTICE OF ALL	B ALLOWED Print Claim for C OWANCE MAILE
ISSUE BATCH NUMBER The terminalmonths of this patent have been disclaimed. (Legal Instruments Examiner) (Date)	TERMINAL DISCLAIMER The term of this patent subsequent to	DRAWINGS Sheets Drwg, Figs. Drwg. (Assistant Examiner)	Print Fig.	CLAIMS Total Claims NOTICE OF ALL	S ALLOWED Print Claim for C OWANCE MAILE UE FEE
The terminalmonths of this patent have been disclaimed. (Legal Instruments Examiner) (Date)	TERMINAL DISCLAIMER The term of this patent subsequent to	DRAWINGS Sheets Drwg, Figs. Drwg. (Assistant Examiner)	Print Fig.	CLAIMS Total Claims NOTICE OF ALL	S ALLOWED Print Claim for C OWANCE MAILE UE FEE
this patent have been disclaimed. (Legal Instruments Examiner) (Date)	TERMINAL DISCLAIMER The term of this patent subsequent to (date) has been disclaimed. The term of this patent shall not extend beyond the expiration date of U.S Patent. No.	Sheets Drwg, Figs. Drwg.	Print Fig.	CLAIM! Total Claims NOTICE OF ALL ISS Amount Due	Print Claim for Cowance Maile UE FEE Date Paid
ė.	TERMINAL DISCLAIMER The term of this patent subsequent to	Sheets Drwg, Figs. Drwg.	Print Fig.	CLAIM: Total Claims NOTICE OF ALL ISS Amount Due	Print Claim for Cowance Maile UE FEE Date Paid
S. FAMA CRIMICA	TERMINAL DISCLAIMER The term of this patent subsequent to	CASSISTANT Examiner) (Assistant Examiner)	(Date)	CLAIM: Total Claims NOTICE OF ALL ISS Amount Due	Print Claim for Cowance Maile UE FEE Date Paid